

The Role of Social Media for Knowledge Sharing and Collaboration in Distributed Teams

Nicole Ellison
School of Information,
University of Michigan

Matthew Weber
& Jennifer Gibbs
School of Communication & Information
Rutgers University

Collaborative Organizations and Social Media
Bowdoin College
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Conceptual Model: Social Media in the Workplace

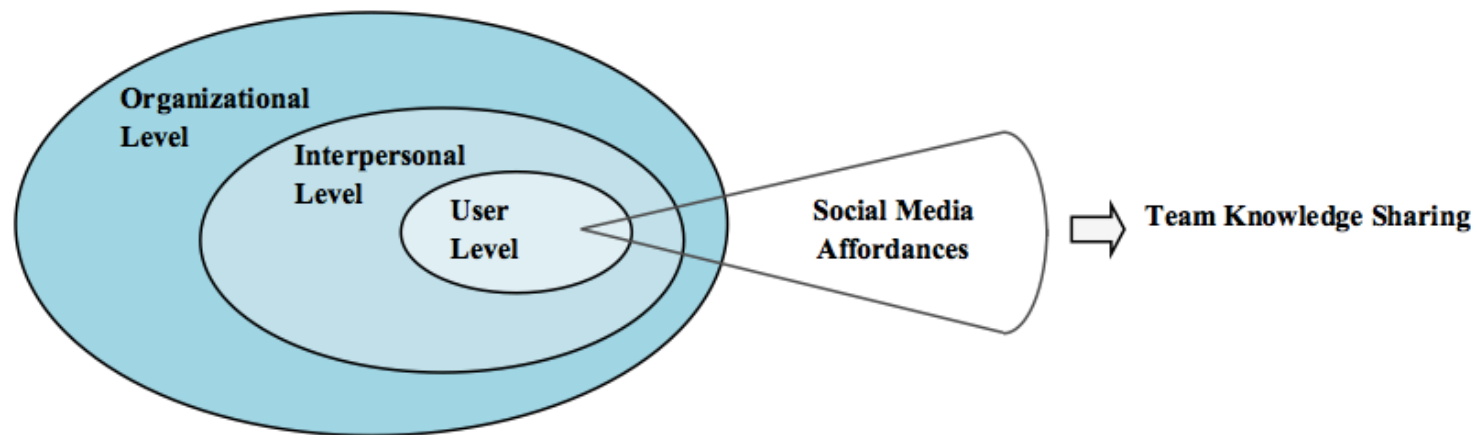




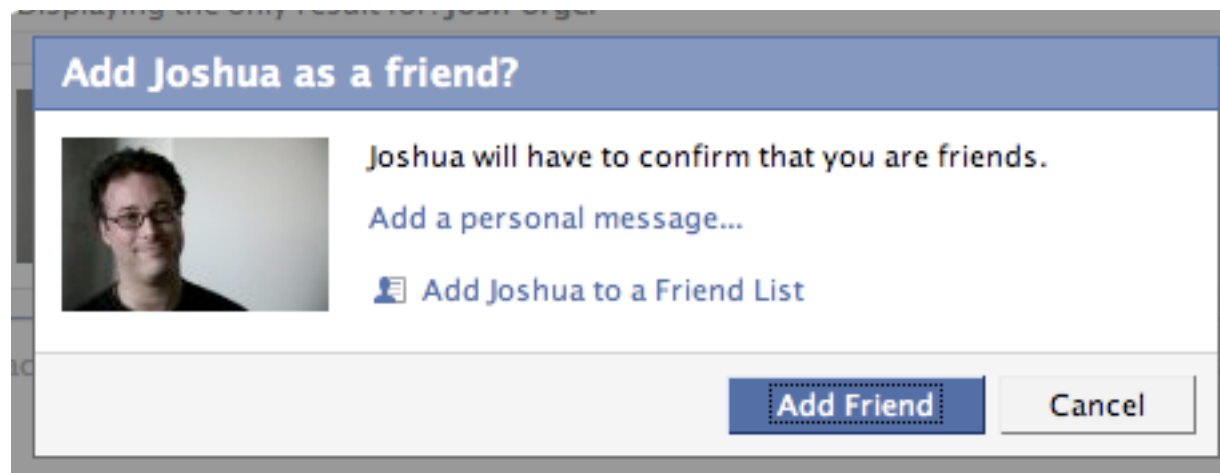
Image: brandwatch

What is a social network site?

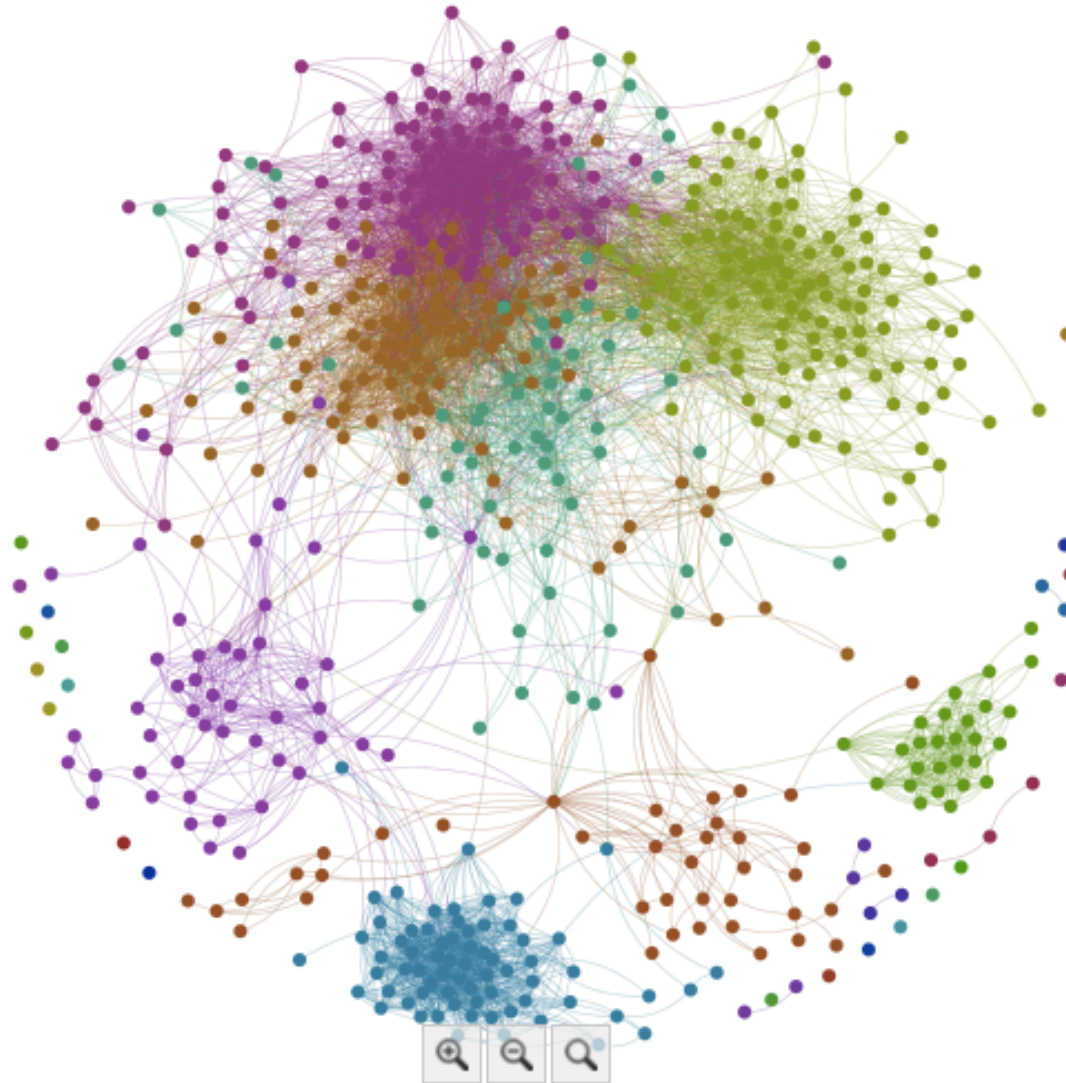
SNSs are “web-based services that allow individuals to

- 1) construct a public or semi-public profile within a bounded system,
- 2) articulate a list of other users with whom they share a connection, and
- 3) view and traverse their list of connections and those made by others within the system.” - boyd & Ellison (2007)

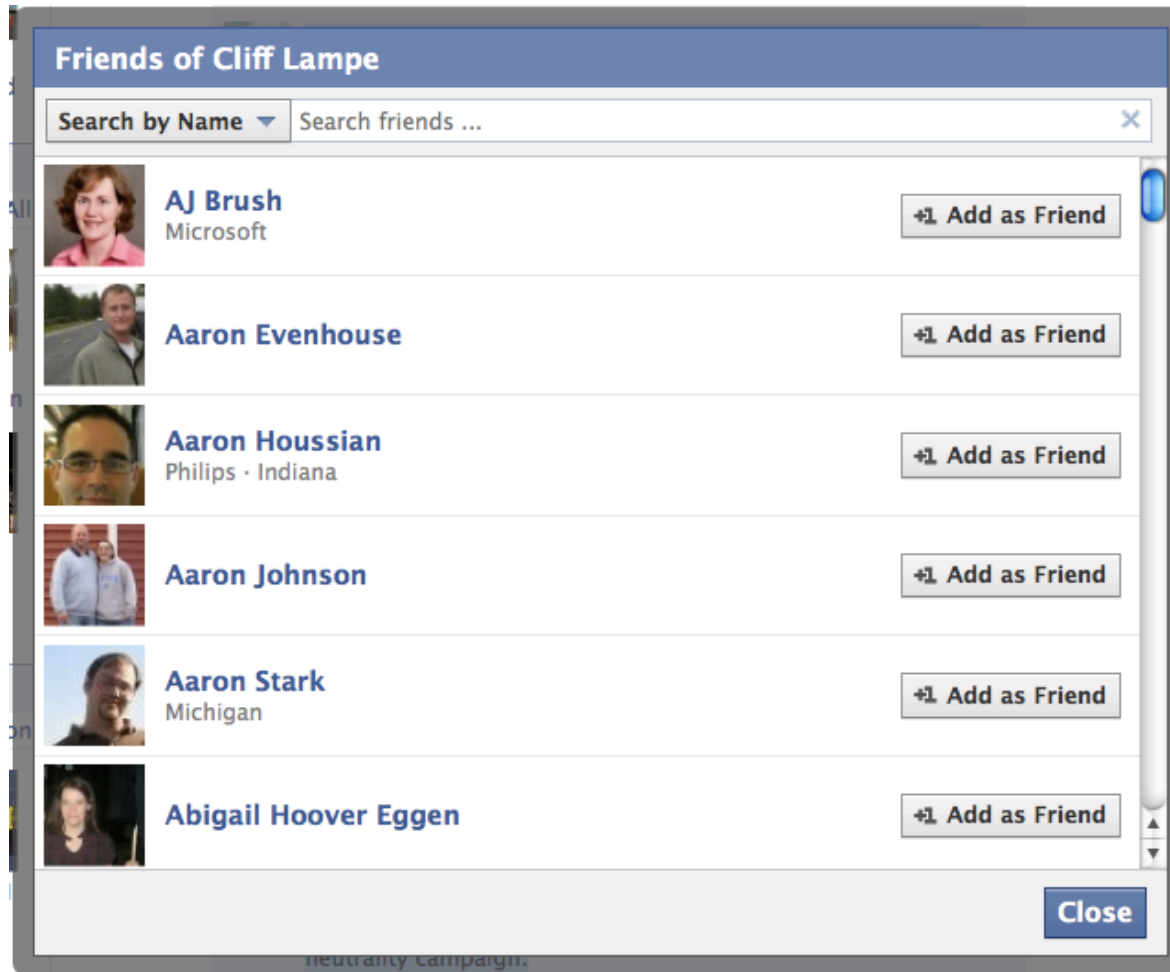
Then: Friends List



Now: Social graph



Then: Ability to View and Traverse Connections



Definition of SNS (2007)

SNSs are “web-based services that allow individuals to

- 1) construct a public or semi-public profile within a bounded system,
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Definition of SNS (2013)


A social network site is a *networked communication platform* in which participants

- 1) have uniquely identifiable profiles that consist of *user-supplied content, content provided by other users, and/or system-provided data*
- 2) can publicly articulate connections that can be viewed and traversed by others; and
- 3) can consume, produce, and/or interact with *streams of user-generated content* provided by their connections on the site.

-Ellison & boyd, 2013

Graph search

 Movies liked by my friends






Dead Soon movie (a.k.a. The Fugue)
Movie

109 like this

People also like I'm Just Saying – Official Movie Page, Fear House and ...

Richard Rushfield, George Jackson and 9 other friends like this





Food Inc
Movie

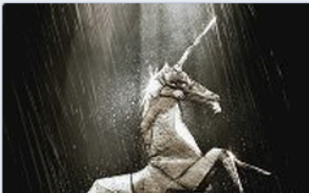
Directed by Robert Kenner

632,343 like this

People also like The Hangover, Food Matters and other movies

Al Cadena, Jesse Engel and 15 other friends like this




Blade Runner
Movie

1,020,868 like this

People also like Star Wars, Batman: The Dark Knight and other movies

Jorge Peña, Charlie Breindahl and 15 other friends like this


More Than 1,000 Pages [View Grid](#)





REFINE THIS SEARCH 


Page Type


Liked by


Name


EXTEND THIS SEARCH 


   

 TV shows they watch

 Photos from these pages

 Videos from these pages

 Discover Something New

 Chat (44)

 Update Status  Add Photos/Video

What's on your mind?

What are you doing?



feeling

happy, sad, tired



watching

UEFA Champions League, Serial, The Hunger Games



reading

Twilight by Stephanie Meyer, Wuthering Heights, Anna Karenina



listening to

Evanescence, Chrisette Michele, Jennifer Lopez



drinking

coffee, tea, hot chocolate



eating

ice cream, lunch, popcorn



Challenge of Doing Scholarship on Social Media & the Organization

- Rapidly shifting domains: how do we ensure our research is relevant even when the tools change?
- How do we avoid re-inventing the wheel when it comes to identifying organizational patterns of use?
- How can we move beyond descriptive work?

Affordance Perspective




Tech Affordances which Support Collaboration in/out of the Workplace

- Affordances of proximity that support collaboration:
 - Events can bring together those with shared interests and expertise
 - Individuals can communicate identity information through their self-presentational choices
 - Being proximate facilitates communication & interaction, which enables knowledge-sharing and question-asking


Pinterest Search Morwenna Add Boards People About

Baking and Afternoon Tea Like Edit 235 pins Last pin 1 hour ago




Wow these are gorgeous! Cupcakes by Cotton & Crumbs

cottonandcrumbs.co.uk




Croquebouche Cupcakes

bakersroyale.com



Pretty tea cups


theloveliestday.com



lime-scented pull-apart cake


1 repin

uneqaminedanslacuisine.com




rainbow bright

flickr.com



A work of art


weheartit.com




Pretty cupcakes-magnolia Bakery


sammyv.files.wordpress.com

Curated by:

 **Morwenna Hill**


Followers





bombón


coqueterias.tumblr.com



I love cupcake wrappers. love this idea to store them in a jar!

1 repin


flickr.com



Ladybug cupcakes

1 repin


flickr.com



Apple cupcakes


1 repin

therasperrybutterfly.com.au




comfort food

sundayvinbed.tumblr.com



Salted caramel thumbprint cookies


fishfoodblog.com



Reminds me of Pinwheel cookies...yumy cupcakes from Donal Skehan

4 repins


thegoodmoodfoodblog.com





button cookies - FUN!

3 repins

vi.sualize.us








cupcake

weheartit.com



SNSs have social and technical affordances that help individuals maintain, invest in, and benefit from their social networks.

SNSs facilitate social interaction

[View Cliff's Friends \(311\)](#)

Searching for people from your networks who match the following:

Interests: underwater hockey

Displaying 1 – 10 of 13 search results.

by making
commonalities
visible

Barack Obama (One Million Strong for Barack)

Information

Group Info

Type: Common Interest – Politics
Description: BARACK OBAMA IS HEADED TO THE WHITE HOUSE...BUT WE NEED HELP ... YOUR HELP to get him there.

Members

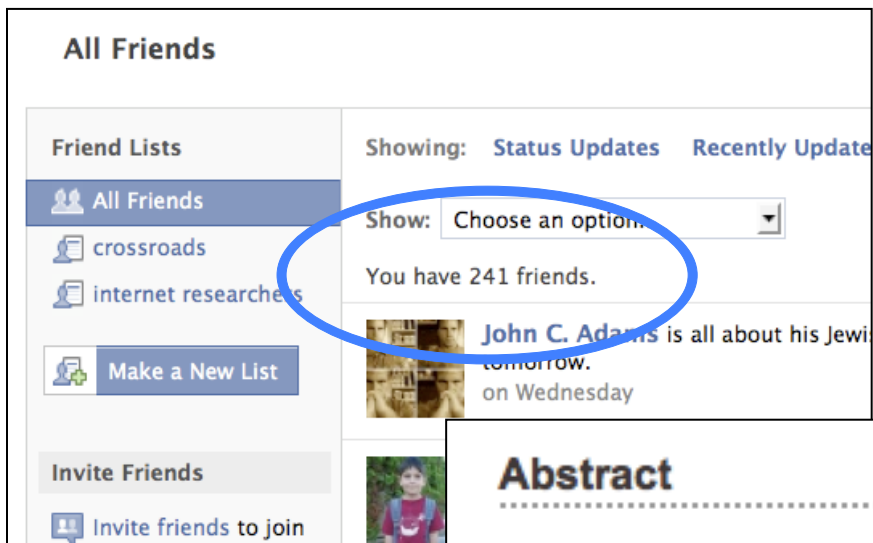
This group has 572,338 members.

[See All](#)

SNSs enable the sharing of identify information and expertise

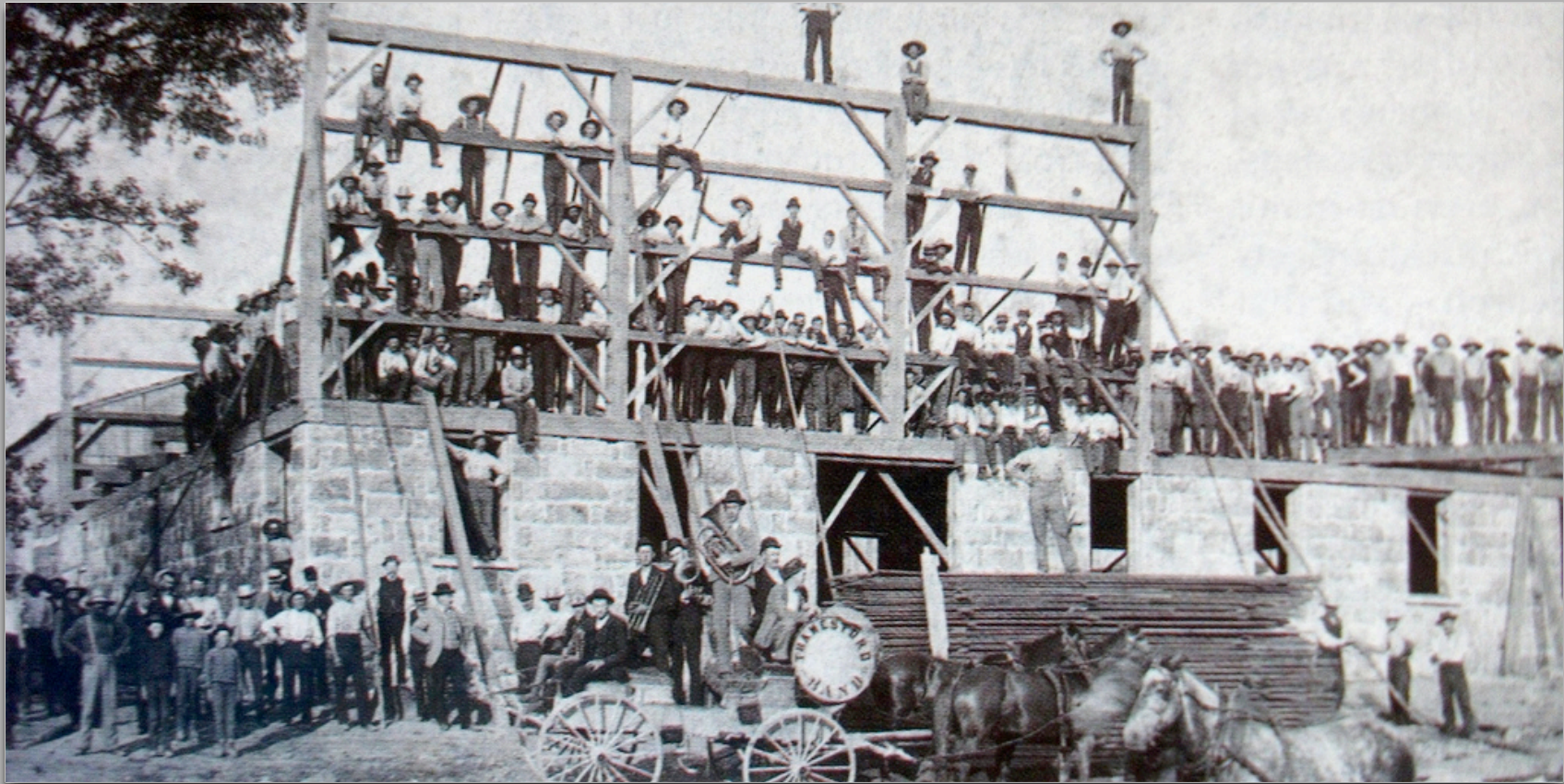
- {image removed for web}

... and the presence of a social network serves to **warrant identity information** (Walther & Parks, 2002)



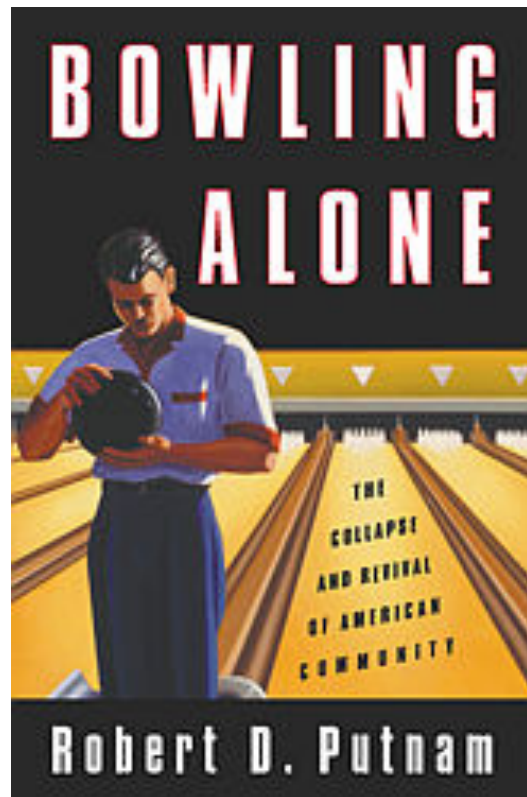
Abstract

The warranting principle pertains to impression formation in Internet communication. It posits that perceivers' judgments about a target rely more heavily on information which the targets themselves cannot manipulate than on self-descriptions. Two experiments employed mock-up profiles resembling the Internet site, Facebook, to display self-generated clues and to display other-generated clues about a Facebook user. The first experiment ($N = 115$) tested perceptions of extraversion. Although warranting was



Social Capital: Facebook contains a set of social and technical affordances that can help people mobilize resources in their social networks.

Social Capital



- Describes the benefits we get from our social connections (e.g., information, social support)
- Lin (2001): Social capital as an **“investment in social relations with expected returns in the marketplace”**
- Putnam distinguishes between **bridging & bonding** social capital

Bonding Social Capital

reflects **strong ties** with family and close friends, who might be in a position to provide **emotional support** or access to scarce resources

Bridging Social Capital

is linked to “**weak ties**” (Granovetter, 1982), loose connections who may provide **useful, novel information** or new perspectives for one another

“... technologies that **expand** one’s social network will primarily result in an **increase in available information and opportunities** — the benefits of a large, heterogeneous network” (Donath & boyd, 2004).

Social Capital & SNSs

- Numerous studies have identified and replicated the **link between SNS use and social capital** (Burke et al., 2010, 2011; Ellison et al., 2007; 2010; 2011; Stutzman and Yoder, 2011; Stutzman 2011; Venezuela, Park, & Kee, 2009)
- Many of these dynamics can be found in organizational settings

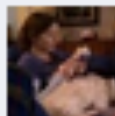
Current Research with Facebook, Inc.: Question-asking in Facebook



Nicole Ellison

Hey, social network -- What are some good day trips we should do with the kids before leaving Boston?

21 hours ago · Like · Comment



Jessica Vitak Providence is not too far and has a great children's museum!

21 hours ago · Like ·  1 person



Cliff Lampe There's kiddie cage fighting in South Boston I think.

21 hours ago · Like



Rebecca Gray Walk the freedom trail, and make sure to check out Paul Revere's house.

17 hours ago · Like



Brandon Brooks If they like baseball, you could go to a Boston Red Sox game.

7 minutes ago · Like

Write a comment...

Calling All Facebook Friends: Exploring Requests for Help on Facebook

Nicole B. Ellison

University of Michigan
enicole@umich.edu

Rebecca Gray

Michigan State University
grayreb2@msu.edu

Jessica Vitak

University of Maryland
jvitak@umd.edu

Cliff Lampe

University of Michigan
calc@umich.edu

Andrew T. Fiore

Facebook, Inc.
atfiore@fb.com

Abstract

Past research suggests Facebook use is linked to perceptions of social capital, a concept that taps into the resources people gain from interactions with their social network. In this study, we examine a sample of public Facebook status updates ($N=20,000$) for instances in which users request a response from their network. These attempts to mobilize resources offer insight into the mechanisms through which Facebook is used for social capital conversion. After identifying mobilization requests ($N=856$), we categorize them by cost (i.e., effort needed to satisfy the request) and type (e.g., opinion, information, social coordination) in order to describe the prevalence of these requests and the extent to which they require effort on the part of the potential responders. Finally, we examine characteristics of these users and the linguistic characteristics of status updates that contain mobilization requests.

Introduction

Facebook, the most heavily used social network site (SNS) in the world, recently announced it supported one billion active monthly users (Facebook 2012). As of 2013, 67% of American Internet-using adults reported using a social network site, up from a mere 5% of adults in February

number of inbound messages from Friends (Burke et al. 2011) or the number of “actual” friends on the site one reports (Ellison et al. 2011). In these studies, measures of use have been positively associated with greater perceived access to resources such as social and emotional support or advice and information, as assessed by measures such as the Internet Social Capital Scales (Williams 2006).

One hallmark of social capital is that it can be converted into other forms of capital (Resnick 2001), yet naturally occurring episodes of social capital conversion “in the wild” are difficult for researchers to capture. This study examines one component of Facebook use we believe is a likely conduit of social capital conversation—*asking questions and making requests of one’s network via Facebook status updates*. Recent SNS scholarship describes the ability to broadcast requests for information and social support as a possible mechanism through which social capital accrual occurs in SNSs (Gray et al. 2013). On the site, status updates enable users to share content directly with their entire network (or a subset thereof), and to make direct requests through use of text, images, links, or video; users’ Friends can reply directly by commenting on the update or through other channels, both within the site or via other channels (e.g., phone calls, text messages).

This study explores one pathway through which social capital conversions are likely to occur: requests for some



Flickr: Spencer77

The background of the slide is a photograph of a cow standing in a lush green field. The cow is dark-colored and is partially visible at the bottom of the frame. The grass is vibrant green and appears to be a mix of different types. The overall scene is bright and natural.

Facebook Relationship Maintenance Behaviors (FRMB)

When I see a friend or acquaintance sharing good news on Facebook, I try to respond.

When I see a friend or acquaintance sharing bad news on Facebook, I try to respond.

When I see someone asking for advice on Facebook, I try to respond.

When a Facebook friend has a birthday, I try to post something on their wall.

When I see someone asking a question on Facebook that I know the answer to, I try to respond.

FRMB (Ellison et al., in press)

- **Facebook Relational Maintenance Behaviors (FRMB): powerful predictor of bridging social capital. Why?**
 - Norms of reciprocity associated with social capital
 - Social grooming: These activities signal “I am paying attention to you” via investments in one’s network
 - Technical: They train Facebook’s News Feed algorithm
 - Social network: Commenting on Friends posts = Access to new networks (Friends of Friends)

Social Media Affordances that Support Knowledge-Sharing

- Context awareness
- Identifying Expertise
- Network transparency
- Looking forward:
 - How do affordances enable knowledge sharing in organizations?
 - Does social media support an increase in team effectiveness?

Bring social into the organization







Organizations & Enterprise Social Networking

- Estimated to be a \$4.6 billion industry this year according to eMarketer
- In 2008, 77 percent of companies in the US utilized at least one social media channel
 - By 2009, that number reached 92 percent (Inc. Magazine; estimated)
- Enterprise social networking systems formalize knowledge seeking channels within the organization
 - Designed to facilitate information sharing and to increase connectedness

Technological Affordances in the Workplace

- Bringing social media into the workplace provides employees with new affordances (Treem & Leonardi, 2012)
 - High degrees of visibility, association, persistence, editability
- Affordances facilitate opportunities for a host of new behaviors – positive and negative

Organizational Networks

- Organizations are trending towards networked patterns of organizing (Podolny & Page 1998; Powell et. al. 2005)
 - Non-profits (Shumate, 2005, 2008)
 - Scientific knowledge (Margolin et. al., 2012)
- Network oriented technology enhances this ongoing shift in organizational behavior

Organizational Networks & Knowledge

- Networks and knowledge are a central focus of organizations today
 - Consciously & subconsciously
- Knowledge must be able to be shared across contexts through relationships and networks, (Kanter, 1988)
 - Distributed teams facilitate the acquisition and application of knowledge (e.g., Madhavan & Grover, 1998; Sole & Edmondson, 2002)
 - Provide access to relevant expertise across the globe (Kirkman et al., 2002)
 - Create diverse knowledge (Gluesing & Gibson, 2004)

Networks, Performance and Organizations

- The connection between network, access to knowledge and performance in the workplace is well established
 - Structural holes = increased likelihood of promotion, mobility and adaptability (Burt, 1992; Podolny & Baron, 1997)
 - Centrality in informal networks increases the likelihood of promotion (Brass, 1984)
- Knowledge-intensive work
 - Knowledge is increasingly central to accomplishment of day-to-day work (Hansen, Mors, & Lovas, 2005; Leonardi & Bailey, 2008; Winter, 1987)
 - Knowledge ties across boundaries (physical, divisional, hierarchical) can increase employees' ability to complete tasks successfully (Cross & Cummings, 2004)

IBM, Social Media & Sales

- Large multinational knowledge-intensive firm, headquartered in the United States
 - More than 50,000 employees
 - Sells technology products and consulting services
 - “Inside Sales” accounts for approximately 18 percent of the company’s annual revenue
- 2011 – 2013 Inside Sales operations
 - 2,275 representatives covering specific brands (Brand Reps)
 - 850 representatives covering regions/sectors (Coverage Reps)

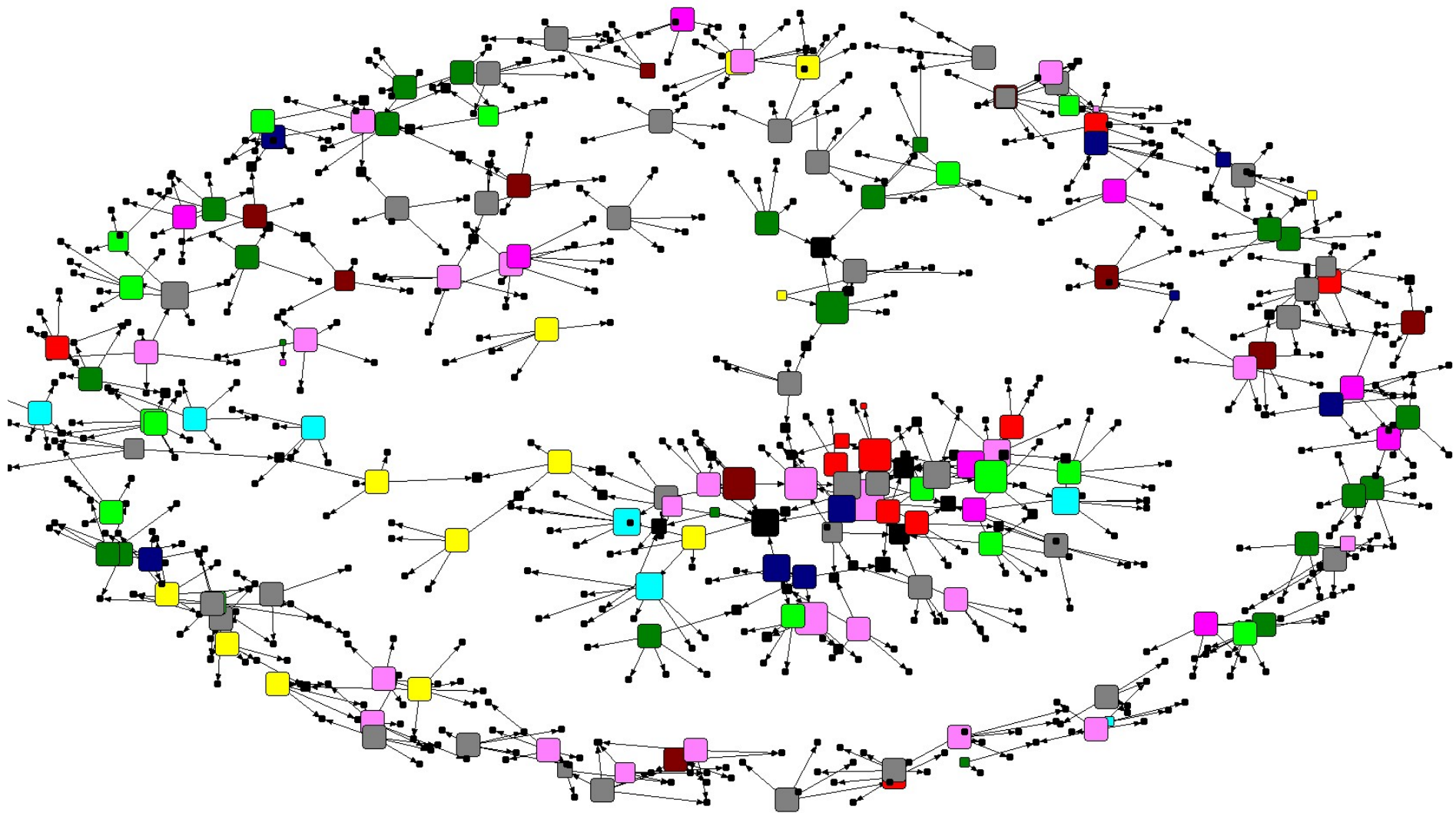


43 sales locations worldwide

80% of salesforce is in large or regional centers

- <50 FTEs (23 Centers)
- 50 – 300 FTEs (15 Centers)
- >300 FTEs (5 Centers)





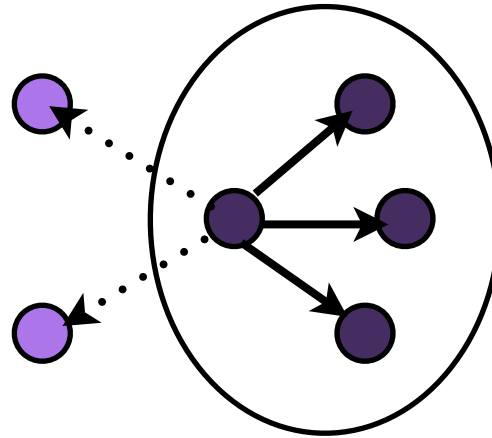
Social Media and Performance

	Model 1	Model 2	Model 3	Model 4
Age	-0.02	-0.03	-0.03	-0.04
Education	0.03	0.04	0.02	0.02
Tenure	-0.04	-0.05	-0.03	-0.02
Client	0.08*	0.10**	0.11**	0.11**
Training		0.04	0.05	0.06*
Task Interdependence		-0.03	0.01	0.00
Twitter Use			-0.01	-0.05*
LinkedIn Use			0.08*	0.11**
Use of IBM Connections				0.08*
Use of External IBM Connections				0.03
R ²	0.011*	0.018*	0.028*	0.049*
ΔR^2		0.007	0.010*	0.021**


*p < .05, ** p < .01, *** p < .001

Social Media & Knowledge

Knowledge
seeking
outside of task /
outside
of a given team




Knowledge seeking
as part of
task defined
interaction



"I talk with my BPs every day. My field rep is calling me regularly too, because - the thing is we really need to work together to get deals closed.

But when I need to find something, you know - like information, or I need to know something about a product I'm selling, or if I'm not sure I have the right information... that's when I'm sticking my head over the row or hopping onto [the company directory]"

-Coverage sales rep., Toronto



“Technically I’m covering three countries and I have 10 brands. I’m certainly not going to be an expert on all of these yet. So when I have a question, I turn to [enterprise social networking site] to find someone who does know. Then I can just ping that person, and find out what I need.

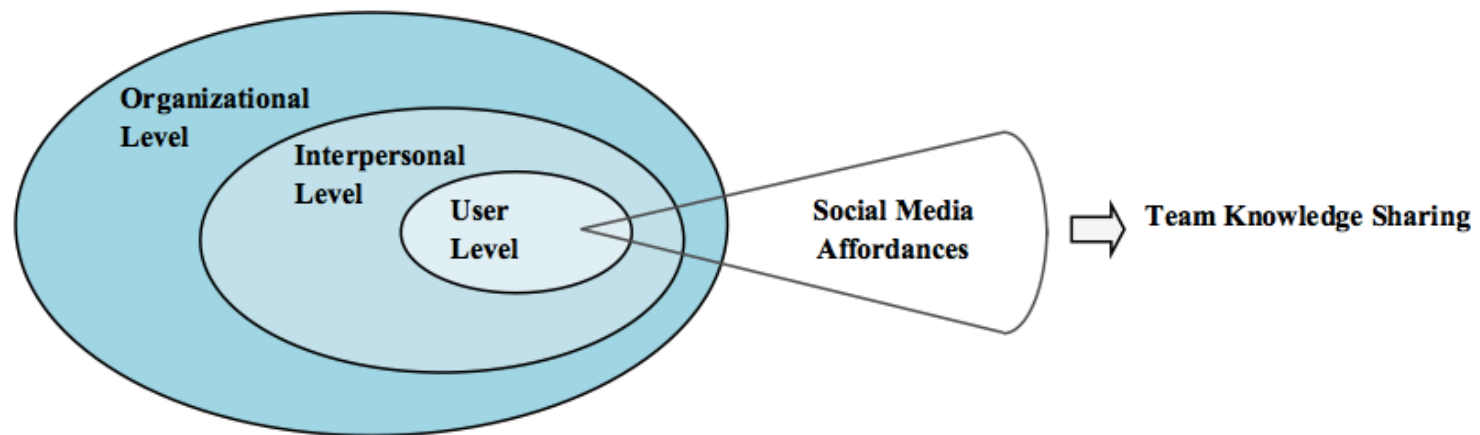
We all work that way.”

-Brand sales rep., Dublin

Lessons Learned & Direction Forward

- Affordances matter (!)
 - Tools enable different types of connections – internal and external
 - External connections access more diverse knowledge; contribute to a growth in social capital
- Social media impacts interpersonal relationships, and affects the organizational culture
 - Connections to performance remain unclear, but directionally there is an impact
- Future Studies
 - Prioritize multilevel perspectives – individual -> team -> organization
 - Connect various framings – individual -> interpersonal -> team -> organization

Social Media in the Organization



Thank you!

- Nicole Ellison
 - School of Information, University of Michigan
 - enciole@umich.edu
- Matthew Weber
 - School of Communication & Information, Rutgers University
 - matthew.weber@rutgers.edu

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